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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/667,000	09/18/2003	Arnold G. Legband		6650
31083	7590	12/23/2005		
THOMTE, MAZOUR & NIEBERGALL, L.L.C. 2120 S. 72ND STREET, SUITE 1111 OMAHA, NE 68124				
			EXAMINER HORTON, YVONNE MICHELE	
			ART UNIT 3635	PAPER NUMBER

DATE MAILED: 12/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/667,000	<b>Applicant(s)</b> LEGBAND, ARNOLD G.	
	<b>Examiner</b> Yvonne M. Horton	<b>Art Unit</b> 3635	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 18 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-5,8-12 and 14-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,8-12,14,17,18 is/are rejected.
- 7) ☒ Claim(s) 5,15 and 16 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Objections***

Claim 1 recites the limitation "said brace" in line 11. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

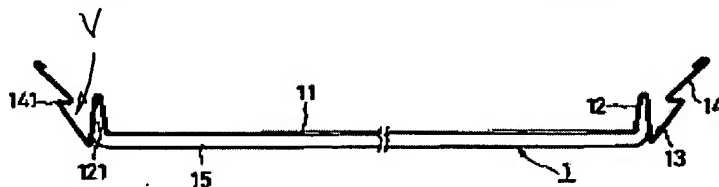
Claim 1-5,8-12,15,17 and 18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The use of "generally", "substantially" and "substantial" render the claims as being vague in that it encompasses a broad aspect of the invention. It is not clear if that which follows is or is not the crux of the applicant's invention. For instance, if something is "generally" U-shaped, this could encompass a "U", a "C", or even an "L" shaped element.

Claims 1-5,8 and 9 remain objected to because of the following informalities: The applicant is reminded that the claims are directed to the sub-combination of "a bracket" and not the combination of "the bracket, new building structure, the existing building structure, or the frame". If it is the combination that the applicant is seeking patent protection, he must positively cite "the bracket, new building structure, the existing building structure, or the frame" in the claims. Until further clarification, the claims have been examined only as the sub-combination of the bracket. Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

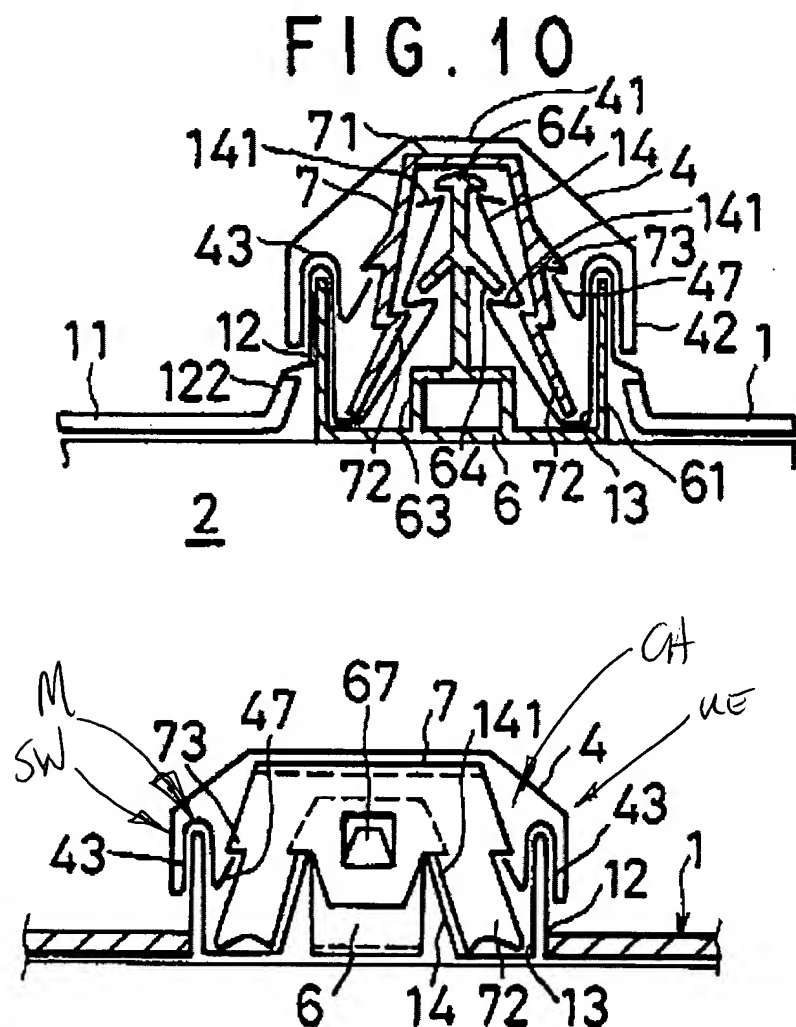
Claims 1-4 and 8,9 are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent #5,845,446 to FUNAKI et al. FUNAKI et al. discloses a bracket (4), *for use in coupling a building panel (1) to a structure having at least one building panel (1) with an outwardly facing surface (as at the ends of the panel shown in figure 1) that is shaped to have elongated alternating peaks (12,14,121,141) and valleys (13,V) see below,*



wherein the bracket (4) includes forward/rearward members (42) each having upper (UE) and lower end (43-45 and 47) portions that are shaped and sized to “marry” with the alternating peaks (12,14,121,141) and valleys (13,V) of the at least one building panel (1) when the bracket (4) is positioned “generally” perpendicular to the alternating peaks (12,14,121,141) and valleys (13,V) of the at least one building panel (1). The applicant is reminded that the claim is directed to the “bracket” for use in a particular situation. The claims does not positively encompass the building panels. If the applicant desires patent protection for the bracket and the building panels, the claim must be directed to the combination or the claim must cite a bracket and a panel. For purposes of this action only the bracket has been given patentable weight. The forward/rearward members (42) of FUNAKI et al. are spaced apart by a top wall (41)

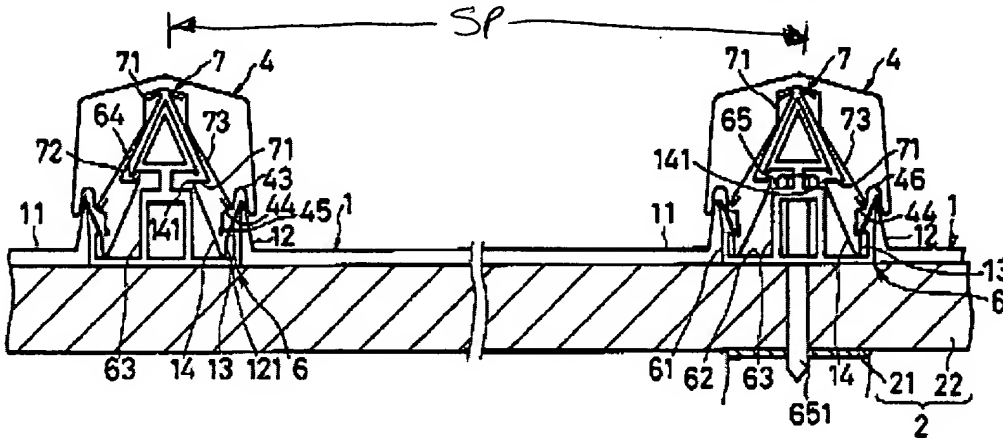
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and coupled to the forward/rearward members (42) through sidewall members (SW), see the marked figure below. The forward/rearward members (42) further define a channel (CH), see also the marked attachment below; wherein the channel (CH) extends along the length of the bracket (4) and is shaped and sized to "substantially" enclose at least one fastener (6,14,141,351). In reference to claim 2, the forward/rearward



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members (42) are in "substantial" parallel relationship. Regarding claim 3, the forward/rearward members (42) and top wall member (41) are made out of an insulative material – metal or resin. In reference to claim 4, the channel (CH) is shaped and sized to simultaneously and "substantially" enclose a plurality of fasteners (6,14,141,351). In



reference to claim 7, the spatial distance (SP) between the building panels (1) is "sufficient" to receive a layer of insulative material (not shown), column 10, lines 47-52. Regarding claim 8, the lower end portions forward/rearward members (42) are shaped and have height so that a "substantial" portion of the lower end portions (43,47) engage the outwardly facing surfaces of the at least one building panel (1) as at (M), see the marked figure above. In reference to claim 9, the forward/rearward (42) and top (41) members form a "general" U-shaped cross-section.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 10-13 stand rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #5,845,446 to FUNAKI et al. The structure of FUNAKI et al. discloses steps

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obvious to securing building panels (1) including the steps of providing at least one bracket (4) comprising forward and rearward spaced-apart wall members (42), having upper and lower end portions (43,47), coupled to one another by a top wall member (41), and providing said at least one bracket (4) with a channel (CH), see the marked figure above, defined by said forward, rearward (42) and top wall members (41), which extends at least partially along a length of said at least one bracket (4) and is sized and shaped to substantially enclose said at least one fastener (6,14,141,351), shaping and sizing said lower end portions (43,47) of said forward and rearward wall members (42) with a profile to marry (as at M) a profile of the at least one building panel (11); aligning said at least one bracket (4) so that the profile of said bracket (4) is married (as at M) to the profile of said at least one building panel (11); substantially enclosing said at least one fastener (6,14,141,351) within said channel (CH), positioning at least one building panel on the top wall member of said at least one bracket (4), securing the at least one building panel (11) to said bracket (4) and the frame member (22) with the at least one fastener (6,14,141,351). FUNAKI et al. discloses the basic claimed method except for explicitly indication the use of new and existing building panels and fasteners, and except for positioning another panel atop the top wall of the bracket. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made that since the bracket and building panels of FUNAKI et al. are merely interconnected through snap-fitting connections and require no conventional bonding, that removal and replacement thereof would be relatively easy and within the general nature, skill and knowledge of one in the art. For instance, the bracket would merely

have to be removed by a slight pulling force; wherein a new building panel could be laid and either the old or a new bracket placed there over. Thus, there is nothing precluding the panels, brackets and fasteners from being either new or existing. Hence it too would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the structure of FUNAKI et al. with an additional building panel atop a top wall (41) of a bracket of the roofing structure of FUNAKI et al. in order to create a more rigid and structurally sound roofing system while also providing the roofing arrangement with additional means for accommodating more insulation.

Regarding claims 11,12 and 14, FUNAKI et al. also obviously discloses the steps of forming said bracket from a substantially insulative material – metal or resin, column 5, lines 7-9; positioning the forward and rearward wall members (42) a substantially parallel relationship with one another; providing said bracket (4) with a select height to define a select spatial distance (SP) between the building panels (1) such that the building panel (1) is positioned on the top wall (41) of said bracket; disposing a layer of insulative material between the building panels (1), column 10, lines 47-52; enclosing a plurality of existing fasteners (6,14,141,351) within said channel (CH); coupling the bracket (4) the building panels (1) using only the at least one fastener (6,14,141,351) used to secure building panels (1) to said bracket (4) and the frame member (22); sizing and shaping the channel (CH) to substantially enclose the at least one fastener (6,14,141) such that said bracket (4) is substantially prevented from movement with respect to the at least one building panel (1); wherein said bracket (4) is provided with a “generally” U-shaped cross-section. Regarding the step of preventing parallel

movement of the bracket in claim 17, although FUNAKI et al. does not explicitly detail this, he does; however, in column 5, lines 33-50, indicate that his bracket (4) is "pressed down...producing resilient engagement...wherein no positional adjustment is required"; in column 9, lines 29-37, indicates that his bracket (4) "ensures stable engagement" with the other roofing members; and in column 10, lines 36-40 indicates that his structure "prevent his bracket (4) from moving out of alignment". Hence, it would have been obvious to one having ordinary skill in the art at the time the invention was made that the bracket (4) is prevented from moving, movement that would obviously include both perpendicular and parallel movement. In reference to claim 18, the bracket (4) is "generally" U-shaped.

#### ***Allowable Subject Matter***

Claims 5,15 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Response to Arguments***

Applicant's arguments filed 9/22/05 have been fully considered but they are not persuasive-in-part.

Regarding the applicant's argument that FUNAKI et al. does not detail "forward and rearward wall members that are sized and shaped to marry alternating peaks and valleys of an outwardly facing surface of an existing building panel", as detailed above, FUNAKI et al. clearly discloses the use of a bracket (4) having ends (43-45,47) that are sized and shaped to "marry" alternating peaks (12,14,121,141) and valleys (13,V) of an


outwardly facing surface (the ends face outwardly away from the base (11)) of a building panel (1).

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yvonne M. Horton whose telephone number is (571) 272-6845. The examiner can normally be reached on 6:30 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl D. Friedman can be reached on (571) 272-6842. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Yvonne M. Horton  
Art Unit 3635  
12/20/05